The Behavioral Solution: Conditioning To Kill

By 1946 the U.S. Army had completely accepted Marshall's World War II findings of a 15 to 20% firing rate among American riflemen, and the Human Resources Research Office of the US Army subsequently pioneered a revolution in combat training that replaced the old method of firing at bull's-eye targets with deeply ingrained operant conditioning using realistic, man-shaped pop-up targets that fall when hit.

The discriminative stimulus was a realistic target popping up in the soldier's field of view. For decades this target was a two-dimensional silhouette, but in recent years both the military and police forces have been changing to mannequin-like, three-dimensional, molded plastic targets; photo realistic targets; and actual force-on-force encounters against live adversaries utilizing the paint pellet projectile training systems pioneered by The Armiger Corporation under the name of Simunition. These are key refinements in the effectiveness of the conditioning process, since it is crucial that the discriminative stimulus used in training be as realistic as possible in its simulation of the actual, anticipated stimulus if the training is to be transferred to reality in a crucial, life-and-death situation.

The operant response being conditioned is to accurately fire a weapon at a human being, or at least a realistic simulation of one. The firer and the grader know if the firing is accurate, since the target drops when hit. This realistically simulates what will happen in combat, and it is gratifying and rewarding to the firer. This minimal gap between the performance (hitting the target) and the initial reinforcement (target drops) is key to successful conditioning since it provides immediate association between the two events. A form of token economy is established as an accumulation of small achievements (hits) are cashed in for marksmanship badges and other associated rewards (such as a three-day pass), and punishments (such as having to retrain on a Saturday that would have otherwise been a day off) are presented to those who fail to perform.

The training process involves hundreds of repetitions of this action, and ultimately the subject becomes like Watson's rats in the Kerplunk Experiment, performing a complex set of voluntary motor actions until they become automatic or reflexive in nature. Psychologists know that this kind of powerful operant conditioning is the only technique that will reliably influence the primitive, midbrain processing of a frightened human being, just as fire drills condition terrified school children to respond properly during a fire, and repetitious, stimulus-response conditioning in flight simulators enables frightened pilots to respond reflexively to emergency situations.

Modern marksmanship training is such an excellent example of behaviorism that it has been used for years in the introductory psychology course taught to all cadets at the US Military Academy at West Point as a classic example of operant conditioning. In the 1980s, during a visit to West Point, B.F. Skinner identified modern military marksmanship training as a near-perfect application of operant conditioning.

Throughout history various factors have been manipulated to enable and force combatants to kill, but the introduction of conditioning in modern training was a true revolution. The application and perfection of these basic conditioning techniques appear to have increased the rate of fire from near 20% in World War II to approximately 55% in Korea and around 95% in Vietnam. Similar high rates of fire resulting from modern conditioning techniques can be seen in FBI data on law enforcement firing rates since the nationwide introduction of modern conditioning techniques in the late 1960s.

One of the most dramatic examples of the value and power of this modern, psychological revolution in training can be seen in Richard Holmes' observations of the 1982 Falklands War. The superbly trained (i.e., conditioned) British forces were without air or artillery superiority and were consistently outnumbered three-to-one while attacking the poorly trained (i.e. unconditioned) but well equipped and carefully dug-in Argentine defenders. Superior British firing rates (which Holmes estimates to be well over 90%) resulting from modern training techniques has been credited as a key factor in the series of British victories in that brief but bloody war. Today nearly all first-world nations and their law enforcement agencies have thoroughly integrated operant conditioning into their marksmanship training. It is no accident that in recent years the world's largest employer of psychologists is the US Army Research Bureau. However, most third-world nations, and most nations which rely on large numbers of draftees rather than a small, well trained army, generally do not (or cannot) spare the resources for this kind of training. And any future army or law enforcement agency which attempts to go into close combat without such psychological preparation is likely to meet a fate similar to that of the Argentines.

Conditioning Kids To Kill

Thus the tremendous impact of psychological "conditioning" to overcome the resistance to killing can be observed in Vietnam and the Falklands where it gave US and British units a tremendous tactical advantage in close combat, increasing the firing rate from the World War II baseline of around 20% to over 90% in these wars.

Through violent programming on television and in movies, and through interactive point-and-shoot video games, the developed nations are indiscriminately introducing to their children the same weapons technology that major armies and law enforcement agencies around the world use to "turn off" the midbrain "safety catch" that Brigadier General S.L.A. Marshall discovered in World War II.

US Bureau of Justice Statistics research indicates that law enforcement officers and veterans (including Vietnam veterans) are statistically less likely to be incarcerated than a nonveteran of the same age. The key safeguard in this process appears to be the deeply ingrained discipline that the soldier and police officer internalize with their training. However, by saturating children with media violence as entertainment, and then exposing them to interactive "point-and-shoot" arcade and video games, it has become increasingly clear that society is aping military conditioning, but without the vital safeguard of discipline.

The same sort of discipline that sets boundaries for members of the military is also part of the hunting subculture, the other sector of society that is familiar with guns. In this environment there are: strict rules about not pointing guns at people, extreme cautions regarding the safety of individuals, and often even respect for their prey, all of which hunters pass on as part of their socialization process and which are reinforced by strict laws. Video game players are not instilled with the same values.

The observation that violence in the media is causing violence in our streets is nothing new. The American Academy of Pediatrics, the American Psychiatric Association, the American Medical Association, and their equivalents in many other nations have all made unequivocal statements about the link between media violence and violence in our society. The APA, in their 1992 report Big World, Small Screen, concluded that the "scientific debate is over." And in 1993 the APA's commission on violence and youth concluded that "there is absolutely no doubt that higher levels of viewing violence on television are correlated with increased acceptance of aggressive attitudes and increased aggressive behavior." The evidence is, quite simply, overwhelming.

Dr. Brandon Centerwall, professor of epidemiology at the University of Washington, has summarized the overwhelming nature of this body of evidence. His research demonstrates that, anywhere in the world that television is introduced, within 15 years the murder rate will double. (And across 15 years the murder rate will significantly under-represent the problem because medical technology developments will be saving ever more lives each year.)

Centerwall concludes that if television had never been introduced in the United States, then there would today be 10,000 fewer homicides each year in the United States, 70,000 fewer rapes, and 700,000 fewer injurious assaults. Overall violent crime would be half what it is. He notes that the net effect of television has been to increase the aggressive predisposition of approximately 8% of the population, which is all that is required to double the murder rate. Statistically speaking 8% is a very small increase. Anything less than 5% is not even considered to be statistically significant. But in human terms, the impact of doubling the homicide rate is enormous.

There are many psychological and sociological processes through which media violence turns into violent crime. From a developmental standpoint we know that around the age of 18 months a child is able to discern what is on television and movies, but the part of their mind that permits them to organize where information came from does not fully develop until they are between ages five and seven. Thus, when a young child sees someone shot, stabbed, beaten, degraded, abused, or murdered on the screen, for them it is as though it were actually happening. They are not capable of discerning the difference, and the effect is as though they were children of a war zone, seeing death and destruction all around them, and accepting violence as a way of life.

From a Pavlovian, or classical conditioning standpoint, there is what Dave Grossman has termed the Reverse-Clockwork Orange process. In the movie, Clockwork Orange, a sociopath is injected with a drug that makes him nauseous and he then is exposed to violent movies. Eventually he comes to associate all violence with nausea and is somewhat "cured" of his sociopathy. In real life millions of children are exposed to thousands of repetitions of media violence, which they learn to associate with not nausea but pleasure in the form of their favorite candy, soda, and a girlfriend's perfume as they sit and laugh and cheer at vivid depictions of human death and suffering.

Finally, from a behavioral perspective, the children of the industrialized world participate in countless repetitions of point-and-shoot video and arcade games that provide the motor skills necessary to turn killing into an automatic, reflexive, "kerplunk" response, but without the stimulus discriminators and the safeguard of discipline found in military and law enforcement conditioning.

Thus, from a psychological standpoint, the children of the industrialized world are being brutalized and traumatized at a young age, and then through violent video games (operant conditioning) and media violence (classical conditioning) they are learning to kill and learning to like it. The result of this interactive process is a worldwide virus of violence.

A hundred things can convince the forebrain to take gun in hand and go to a certain point: poverty, drugs, gangs, leaders, radical politics and the social learning of violence in the media. But traditionally all of these influences have slammed into the resistance that a frightened, angry human being confronts in the midbrain. With the exception of violent sociopaths (who, by definition, do not have this resistance) the vast, vast majority of circumstances are not sufficient to overcome this midbrain safety net. But, if you are conditioned to overcome these midbrain inhibitions, then you are a walking time bomb, a pseudo-sociopath, just waiting for the random factors of social interaction and forebrain rationalization to put you in the wrong place at the wrong time.

An effective analogy can be made to AIDS in attempting to communicate the impact of this technology. AIDS does not kill people, it destroys the immune system and makes the victim vulnerable to death by other factors. The "violence immune system" exists in the midbrain, and conditioning in the media creates an "acquired deficiency" in this immune system, resulting in what Grossman has termed "Acquired Violence Immune Deficiency Syndrome" or AVIDS. As a result of this weakened immune system, the victim becomes more vulnerable to violence enabling factors such as: poverty, discrimination, drugs, gangs, radical politics and the availability of guns. In behavioral terms this indiscriminate use of combat conditioning techniques on children is the moral equivalent of giving an assault weapon to every child in every industrialized nation in the world. If, hypothetically, this were done, the vast, vast majority of children would almost certainly not kill anyone with their assault rifles; but if only a tiny percentage did, then the results would be tragic, and unacceptable. It is increasingly clear that this is not a hypothetical situation. Indiscriminate civilian application of combat conditioning techniques as entertainment has increasingly been identified as a key factor in worldwide, skyrocketing violent crime rates. Between 1957 and 1992 aggravated assault in the United States, according to the FBI, went up from around 60 per 100,000 to over 440 per 100,000. Between 1977 and 1986 the "serious assault" rate, as reported to Interpol:

* Increased nearly fivefold in Norway and doubled in Greece, the murder rate more than tripled in Norway and doubled in Greece.
* In Australia and New Zealand the "serious assault" rate increased approximately fourfold, and the murder rate approximately doubled in both nations.
* During the same period the assault rate tripled in Sweden, and approximately doubled in Belgium, Canada, Denmark, England-Wales, France, Hungary, Netherlands, Scotland, and the United States; while all these nations (with the exception of Canada) also had an associated (but smaller) increase in murder.

All of these increases in violent crime, in all of these nations, (which Dave Grossman has termed a virus of violence) occurred during a period when medical and law enforcement technology should have been bringing murder and crime rates down. It is no accident that this has been occurring primarily in industrialized nations, since the factor that caused all of these increases is the same factor that caused a revolution in close combat, except in this case it is the media, not the military that has been conditioning kids to kill.

Conclusion: The Future of Violence, Society, and Behaviorism

The impact of behavioral psychology on combat in the second half of the 20th century has been truly revolutionary. It has been a quiet, subtle revolution, but nonetheless one with profound effects. A healthy, self aware, democratic society must understand these processes that have been set in play on its streets and among its armed forces. Among government institutions this is being done with great care and safeguards, nevertheless it should trouble and concern a society that this is occurring and (far more so) that it may well be necessary.

In a world of violent crime, in a world in which children around the globe are being casually conditioned to kill, there may well be justification for the cop and the peacekeeper to be operantly conditioned to engage in deadly force. Indeed, Ken Murray has conducted pioneering research at Armiger Police Training Institute that concludes that, even with conditioning, the psychology of the close combat equation is still badly skewed against the forces of law and order. Building on the Killing Enabling Factors first developed by Dave Grossman, Murray's widely presented findings have been instrumental in a major reassessment of the need for a comprehensive, systematic approach to law enforcement training. But if the carefully safeguarded conditioning of military and law enforcement professionals is a necessary evil that is still a legitimate cause for concern, how much more should a society be concerned about the fact hat the exact same process is being indiscriminately applied to our children, but without the safeguards?

The impact of behavioral technology in the second half of the 20th century has been profound, closely paralleling the time frame and process of nuclear technology. Behavioral psychology has done to the microcosm of battle what nuclear weapons did to the macrocosm of war. Just as our civilization is entering into the 21st century with a determination to restrain and apply itself to the challenges of nuclear proliferation, so too might the time have come to examine the indiscriminate proliferation of violent behavioral conditioning distributed indiscriminately to children as a form of entertainment.